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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,040	03/10/2004	Jean H. Scholten		2745
7590	06/06/2006		EXAMINER	
JAMES KUAN/TRIATEK, Inc. 2976 PACIFIC DR. NORCROSS, GA 30071			PRICE, CRAIG JAMES	
			ART UNIT	PAPER NUMBER
			3753	
DATE MAILED: 06/06/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/796,040	SCHOLTEN, JEAN H.	
	Examiner Craig Price	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 February 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 6-9 is/are pending in the application.  
 4a) Of the above claim(s) 1-5 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 6-9 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 1/12/2006 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### Miscellaneous

1. It appears that applicant's attorney is not registered to practice with the United States Patent and Trademark Office. However, as per 3.73(b) permitting assignee to take action in applications, in order to be clear in discerning the propriety of future responses, it is suggested that all future responses in this application be countersigned by the applicant.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83 (b) because they are incomplete. 37 CFR 1.83 (b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible clearly exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement

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sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 1,2,3 and 4 have been renumbered claims 6-9.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-9 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

Claim 6 recites the limitation "existing venture tube" in line1. There is insufficient antecedent basis for this limitation in the claim. It is unclear as to what the existing venturi valve is comprised of. Please clarify.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed limitation in line 1 of, "significant improvement", is unclear as to the what determines significant. Please clarify.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed limitation in line 2 of, "a specially manufactured ring", is unclear as to the features of the ring. Please clarify.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed limitation in lines 6, 7 and 8 of, "the plunger is reconfigured so that a piston ring device can be cut and inserted at the time of assembly

of a valve", is unclear. The claimed limitation does not positively recite, how the plunger is reconfigured and where the piston ring device is being inserted at the time of assembly of the valve. Please clarify.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed limitation in line 2, "the opening", is unclear. It is unclear as to where the opening is located or what component has this opening. Please clarify.

Claims 7,8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 7,8 and 9 are indefinite because of the closed ended transitional phrase "consisting of", where the elements of the dependent claims are being pulled into the independent claim. Please clarify.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Gorchev et al. (3,204,664).

Regarding claim 6, Gorchev et al. disclose an air flow control device which has a "specially mounted ring onto the moveable plunger in the cone assembly" see figure 1. Note item 23 mounted on 24,20.

Regarding claim 7, Gorchev et al. disclose that the plunger is reconfigured so that a piston ring device can be cut and inserted at the time of assembly of the valve. The device of Gorchev et al. is as much configured in the same manner as applicant's device in order to perform the same function.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Newly numbered claims 6-9, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorchev et al. (3,204,664) in view of Ziege (2,917,077).

Regarding claim 6, Gorchev et al. discloses a existing venturi valve airflow device which is used to produce constant-velocity flow of varying-pressure airflow in a forced air heating system whose area opening can be adjusted by sash movement consisting of the following, external valve assembly in shaped venturi form (85), internal shaft connected to the external valve (82), internal spring loaded plunger cone (88,85) that slides along the shaft, and the pivot arm connected to the internal shaft (106).

Gorchev et al. teaches all of the features of the claimed invention, but lacks the insertion of a specially manufactured ring between the spring loaded plunger cone/valve head and a washer.

The feature believed to be called for by the claims over the prior art to Gorchev et al., concern specific structural elements of the dampening mechanism, which details are not exclusive to air handling systems. Ziege shows a specially manufactured ring (40) inserted between a spring loaded plunger cone and a washer, as seen in Figure 1, cooperating with a "tube" or cylinder (29) forming a dampening piston/cylinder arrangement for the purpose of damping valve motion.

In view of the patent of Ziege, it would have been obvious to modify the venturi valve airflow damping device (90) of Gorchev et al. to include a specially manufactured ring (40), onto the spring loaded plunger cone at rod (82) of Gorchev et al. cooperating with a cylinder, in order to provide a system that permits of dampening of valve motion as recognized by Ziege.

Regarding claim 7, the plunger is reconfigured so that a piston ring device can be cut and inserted at the time of the assembly of the valve.

Regarding claim 8, in the device of the combination, the plunger cone includes a tube (29) as taught by Ziege. The "tube" is believed to be, inherently "polished" in order for the piston (40) to slide smoothly thereon.

Regarding claim 9, the shaft (82) of Gorchev et al., at the other end of the valve is believed to inherently polished, to permit smooth movement of the valve (85-2) relative to the rod (82).

7. Newly numbered claims 8 and 9, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorchev et al. (3,204,664) in view of Ziege (2,917,077) as applied to claims 7 and 8, and further in view of Goss et al. (3,592,222).

Gorchev et al. and Ziege have taught all of the features of the claimed invention except that the tube is polished.

Goss et al. a reciprocating valve used in fluids systems which teaches the use of a polished surface (Col. 3, Lns. 39-46).

In view of the Goss et al. patent, it would have been obvious to one of ordinary skill in the art at the time of invention, to employ the polished surface of Goss et al. onto

the surface of Gorchev and Ziege to have the tube within which the plunger and the ring travel is polished at least 4 inches from the opening with no weld seams present and that the shaft holding the plunger is also polished, in order to maintain a seal with the sealing element (Col. 3, Lns. 39-46).

***Response to Arguments***

8. Applicant's arguments with respect to claims 6-9 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM M-R.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP



30 May 2006



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